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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,767	11/03/2005	Martina Ebert	STOPPELMANN1	6941
1444 7590 08/20/2008 BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303				
EXAMINER				
USELDING, JOHN E				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,767

**Applicant(s)**

EBERT ET AL.

**Examiner**

John Uselding

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-14 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 7/14/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-8, 13, and 14 in the reply filed on 8/7/2008 is acknowledged. The traversal is on the ground(s) that unity of invention is not destroyed by Kumaki EP 0863180. This is not found persuasive because applicant has not provided any reasons as to why Kumaki doesn't teach all to the limitations of claim 1. Since claim 1 is not novel there is a lack of unity since the claims do not share the common technical feature of claim 1 that links the claims.

The requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

2. The disclosure is objected to because of the following informalities: There is a typographical error in paragraph 0015.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumaki et al. (EP 0863180).
5. Regarding claim 1: Applicant claims a polyamide molding compound having a partially crystalline polyamide, which includes partially aromatic copolyamides. Kumaki et al. (hereinafter Kumaki) teach nylon 66/6T/6I (page 3, line 26), which meets the polyamide limitations. Applicant claims calcium carbonate that has an average particle size of at most 100 nm. Kumaki teach using calcium carbonate fillers that have an average particle size of 50-10,000 nm (page 3, lines 35-38). It is obvious to select the portion of the range that is 100 nm and below since it has been held that choosing the overlapping portion, of the range taught in the prior art and the range claimed by the applicant, has been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 USPQ 549.
6. Regarding claim 2: applicant claims that the compound includes at most 40 wt% of the calcium carbonate. Kumaki teach using 5-60% inorganic filler (page 2, line 45). They teach embodiments that use less than 40% of inorganic filler (Table 1).
7. Regarding claim 3: applicant claims that the calcium carbonate has an average particle size of at most 90 nm. Kumaki teach using calcium carbonate fillers that have an average particle size of 50-10,000 nm (page 3, lines 35-38). It is obvious to select the portion of the range that is 90 nm and below.
8. Regarding claim 4: applicant claims that the partially aromatic copolyamides are based on the monomers hexamethylene diamine and aromatic carboxylic acids.

Kumaki teach that their polyamide can be made from monomers of hexamethylene diamine and aromatic carboxylic acids such as terephthalic acid and isophthalic acid (page 3, lines 6-19).

9. Regarding claim 5: applicant claims that the aromatic dicarboxylic acids include terephthalic acid and isophthalic acid in the ratio of 70/30. Kumaki teach the dicarboxylic acids terephthalic acid and isophthalic acid (page 3, lines 6-19 and 26). They, however, fail to teach the ratio of dicarboxylic acids used. It would have been obvious to try any ratio, including 70/30, given that there is a finite number of ratios available and expect them all to function in the same or a similar capacity. It would have been obvious to have optimized the ratio for a desired glass transition temperature, melting point, and adsorption of moisture and solvents.

10. Regarding claim 6: applicant claims a blank made of injection molded polyamide molding compound of claim 1. A blank is any piece of material waiting to be made into something. Kumaki injection mold their composition in a material that can then be made into various products (page 6, lines 1-18). This intermediate material is considered a blank. Since the composition is the same it will have the same physical properties that have been claimed.

11. Regarding claim 13: applicant claims that the average particle size is at most 80 nm. Kumaki teach using calcium carbonate fillers that have an average particle size of 50-10,000 nm (page 3, lines 35-38). It is obvious to select the portion of the range that is 80 nm and below.

12. Regarding claim 14: applicant claims that the particle size is at most 70 nm. Kumaki teach using calcium carbonate fillers that have an average particle size of 50-10,000 nm (page 3, lines 35-38). It is obvious to select the portion of the range that is 70 nm and below.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumaki et al. (EP 0863180) in view of either Yasue et al. (5,414,042) or Umetsu et al. (6,121,388).

14. Applicant claims a reflector for a vehicle using the molding compound of claim 1. This claim includes product by process limitations. Process limitations in product claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. " *In re Thorpe* , 227 USPQ 964, 966 (Fed. Cir. 1985). Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

See also *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

15. Kumaki teach the molding compound as shown above and that it can be used in vehicular exterior parts (page 6, line 3). They also teach that their molding compound is excellent in rigidity and toughness and particularly excellent in tensile elongation, high-speed surface impact fracture characteristic and achieve excellent surface external appearance and dimensional stability of formed articles in good balance (page 2, lines 33-36).

16. While Kumaki teach using their composition to make exterior vehicle parts they fail to teach specifically using it for vehicle reflectors.

17. Yasue et al. teach reinforced polyamide resin compositions that are used to make vehicle reflectors (column 6, line 41). They teach using similar polyamides as Kumaki (column 2, lines 57-68) and calcium carbonate (column 5, lines 56-57).

18. Umetsu et al. teach reinforced polyamide resin compositions that are used to make vehicle reflectors (column 12, lines 46-63). They teach using similar polyamides as Kumaki (column 3, lines 27-59) and calcium carbonate (column 9, lines 66-67).

19. Since they are very similar compositions in the same field of endeavor it would have been obvious to one of ordinary skill in the art at the time the invention was made to used the composition of Kumaki to make the vehicle reflectors of Yasue et al. or Umetsu et al. to make reflectors that are excellent in rigidity and toughness and particularly excellent in tensile elongation, high-speed surface impact fracture

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characteristic and achieve excellent surface external appearance and dimensional stability of formed articles in good balance.

20. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6,165,407) in view of Kumaki et al. (EP 0863180).

21. Applicant claims a vehicle reflector made by a metal coating applied through PVD methods and that the iridescence temperature is at a value higher than 220°C. These claims contain product by process limitations that are discussed above.

22. Tahara et al. teach a method of making a vehicle head lamp reflector (column 24, lines 33-40) that is metallized directly by applying a metal coating through PVD (column 23, lines 34-39). The molded article constituting the reflector part is made using partially crystalline polyamide and calcium carbonate as a filler (column 24, lines 37-39, column 19, line 21, column 20, lines 9-10 and 65).

23. Tahara et al. fails to teach a polyamide that is partially aromatic and the particle size of the calcium carbonate.

24. Kumaki et al. teach what is listed above.

25. Since Kumaki et al. teach a calcium carbonate reinforced polyamide in the same field of endeavor it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the polyamide and calcium carbonate in the molding composition of Tahara et al. to make vehicle head lamp reflectors that are excellent in rigidity and toughness and particularly excellent in tensile elongation, high-speed



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surface impact fracture characteristic and achieve excellent surface external appearance and dimensional stability of formed articles in good balance. This is a simple substitution of one known element for another to obtain predictable results. Since the molding composition and method of making the reflector are the same this combination would provide a reflector with the same physical properties such as an iridescence temperature above 220°C.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Uselding whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:00a.m. to 4:30p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/  
Primary Examiner, Art Unit 1796

John Uselding  
Examiner  
Art Unit 4171

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